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April 12, 2005

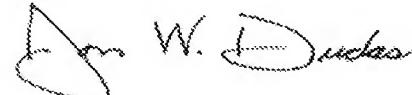
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FILING DATE.

APPLICATION NUMBER: 60/556,922

FILING DATE: *March 26, 2004*

RELATED PCT APPLICATION NUMBER: PCT/US05/09241

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032604

21861 U.S.PTO

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PTO/SB/16 (02-01)

Approved for use through 10/31/2002. OMB 0651-0032
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

Express Mail Label No. EV441452403US

INVENTOR(S)		
Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
Scott Joseph Darin Bradley	Duggan Ritter	Indianapolis, Indiana Indianapolis, Indiana
<input checked="" type="checkbox"/> Additional inventors are being named on the 1 separately numbered sheets attached hereto		
TITLE OF THE INVENTION (280 characters max)		
INTERLOCKING HINGE MOUNT FOR TOP SCREEN FRAME OF A PROJECTION DISPLAY		
CORRESPONDENCE ADDRESS		
Direct all correspondence to:		
<input type="checkbox"/> Customer Number	<input type="text"/>	→
OR	Type Customer Number here	
<input checked="" type="checkbox"/> Firm or Individual Name	JOSEPH S. TRIPOLI, THOMSON LICENSING INC.	
Address	PATENT OPERATIONS.	
Address	P. O. BOX 5312	
City	PRINCETON	State NJ
Country	USA	Telephone 609-734-6834
Fax	609-734-6888	
ENCLOSED APPLICATION PARTS (check all that apply)		
<input checked="" type="checkbox"/> Specification Number of Pages	2	<input type="checkbox"/> CD(s), Number <input type="text"/>
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets	2	<input type="checkbox"/> Other (specify) <input type="text"/>
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76		
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)		
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.	FILING FEE AMOUNT (\$)	
<input type="checkbox"/> A check or money order is enclosed to cover the filing fees		
<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: 07-0832	160	
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.		
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.		
<input checked="" type="checkbox"/> No.		
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____		

Respectfully submitted

SIGNATURE

Patricia A. Verlangieri

Date

3/26/04

TYPED or PRINTED NAME

Patricia A. Verlangieri

REGISTRATION NO.
(if appropriate)

42,201

Docket Number:

PU040078

TELEPHONE 609 734-6867

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

17510/556922 U.S.PTO
032604

PROVISIONAL APPLICATION COVER SHEET
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Docket Number	PU040078	Type a plus sign (+) inside this box →	+
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INVENTOR(S)/APPLICANT(S)		
Given Name (first and middle [if any])	Family or Surname	Residence (City and either State or Foreign Country)
Jon William	Kangas	Greenwood, Indiana

Number 1 of 1

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$)
160**Complete if Known**

Application Number	
Filing Date	March 26, 2004
First Named Inventor	Scott Joseph Duggan et al.
Examiner Name	
Art Unit	
Attorney Docket No.	PU040078

METHOD OF PAYMENT (check all that apply)
 Check Credit card Money Other None
 Order Deposit Account:

Deposit Account Number	07-0832
Deposit Account Name	THOMSON LICENSING INC.

The Director is authorized to: (check all that apply)

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FEE CALCULATION**1. BASIC FILING FEE**

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code	Fee Code	Fee (\$)	Fee (\$)
1001	2001	385	Utility filing fee
1002	2002	170	Design filing fee
1003	2003	265	Plant filing fee
1004	2004	385	Reissue filing fee
1005	2005	80	Provisional filing fee
		160	
SUBTOTAL (1)		(\$ 160)	

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	10	-20 **	= 0	X	0	= 0
Independent Claims	2	-3 **	= 0	X	0	= 0
Multiple Dependent				X	0	

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code	Fee Code	Fee (\$)	Fee (\$)
1202	2202	9	Claims in excess of 20
1201	2201	43	Independent claims in excess of 3
1203	2203	145	Multiple dependent claim, if not paid
1204	2204	43	** Reissue independent claims over original patent
1205	2205	9	** Reissue claims in excess of 20 and over original patent
		0	
SUBTOTAL (2)		(\$ 0)	

** or number previously paid, if greater; For Reissues, see above

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code	Fee Code	Fee (\$)	Fee (\$)
1051	2051	65	Surcharge - late filing fee or oath
1052	2052	25	Surcharge - late provisional filing fee or cover sheet
1053	1053	130	Non-English specification
1812	1812	2,520	For filing a request for reexamination
1804	1804	920*	Requesting publication of SIR prior to Examiner action
1805	1805	1,840*	Requesting publication of SIR after Examiner action
1251	2251	55	Extension for reply within first month
1252	2252	210	Extension for reply within second month
1253	2253	475	Extension for reply within third month
1254	2254	740	Extension for reply within fourth month
1255	2255	1,005	Extension for reply within fifth month
1401	2401	165	Notice of Appeal
1402	2402	165	Filing a brief in support of an appeal
1403	2403	145	Request for oral hearing
1451	1451	1,510	Petition to institute a public use proceeding
1452	2452	55	Petition to revive - unavoidable
1453	2453	665	Petition to revive - unintentional
1501	2501	665	Utility issue fee (or reissue)
1502	2502	240	Design issue fee
1503	2503	320	Plant issue fee
1460	1460	130	Petitions to the Commissioner
1807	1807	50	Processing fee under 37 CFR 1.17 (q)
1806	1806	180	Submission of Information Disclosure Stmt
8021	8021	40	Recording each patent assignment per property (times number of properties)
1809	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))
1810	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))
1801	2801	385	Request for Continued Examination (RCE)
1802	1802	900	Request for expedited examination of a design application
Other fee (specify) _____			

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$ 0)

SUBMITTED BY**Complete (if applicable)**

Name (Print/Type)	Patricia A.-Verlangieri	Registration No. (Attorney/Agent)	42,201	Telephone	(609) 734-6867
Signature			Date	March 26, 2004	

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INTERLOCKING HINGE MOUNT FOR TOP SCREEN FRAME OF A PROJECTION DISPLAY**FIELD OF THE INVENTION**

The invention relates generally to a projection display and, in particular a frame for a projection display screen.

BACKGROUND OF THE INVENTION

A problem that all projection display televisions have is keeping the top edge of the screen straight and in the proper location. Plastic cabinets provide nice aesthetics but have a tendency to bow along the top edge, aggravating the ability to keep the top edge of the screen straight and in location. This is an even more severe problem on projection display televisions that incorporate upangle optics because such televisions require a more accurate screen location with respect to the optics.

Prior art techniques that are used to hold the top edge of the screen include screws from behind the set that drive into bosses in the screen frame. However, access to the screws is a problem if the set is hanging on the wall. Another prior art technique uses metal brackets or wooden blocks along the top edge of the cabinet that allow the screen frame to hook on and swing down into position. However, these mounting systems rely on the straightness and stiffness of the basic cabinet to keep the top edge of the screen straight and in location. These blocks or brackets are always intermittent and do not hold the screen along its entire length which may lead to slight undulations in the top edge of the screen frame.

DETAILED DESCRIPTION

The present invention, shown in FIGS. 1-3, provides an extruded metal hinge mechanism that keeps the top of the projection display television screen frame straight and allows the screen assembly to be removed from the front with no screws.

Two aluminum extrusions work in concert as a continuous stiffener for the screen frame and cabinet and also incorporate a hinge detail that allows the screen frame to be easily removed from the front of the set without removing screws from behind. By being continuous, the two aluminum extrusions keep the top edge of the screen and screen frame straight.

When mounted to a plastic cabinet, these extrusions form a low profile, structural member along the top edge of the cabinet. This structural member can be tied into other structural members of the cabinet to help maintain the critical location of the screen frame. Along with being very low cost to tool, aluminum extrusions tend to be inherently straight, stiff and stable as compared to other parts such as plastic extrusions, formed sheet metal, wood, or molded plastic.

Additionally, since the extrusions are linear, it is relatively inexpensive to incorporate "light stop" details that reduce harmful effects of stray light in the cabinet. This basic hinge concept is also applicable with roll formed sheet metal or sheet metal parts made on progressive dies.

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FIGURE 1: THE SCREEN FRAME ASSEMBLED TO THE UPPERMAR FROM
THE FRONT AND THE BACK

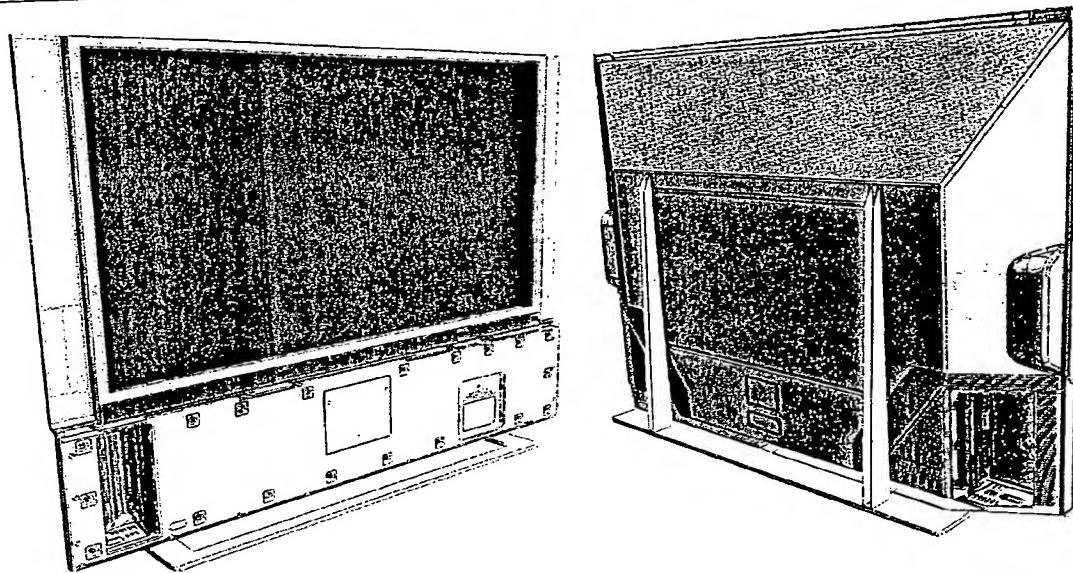
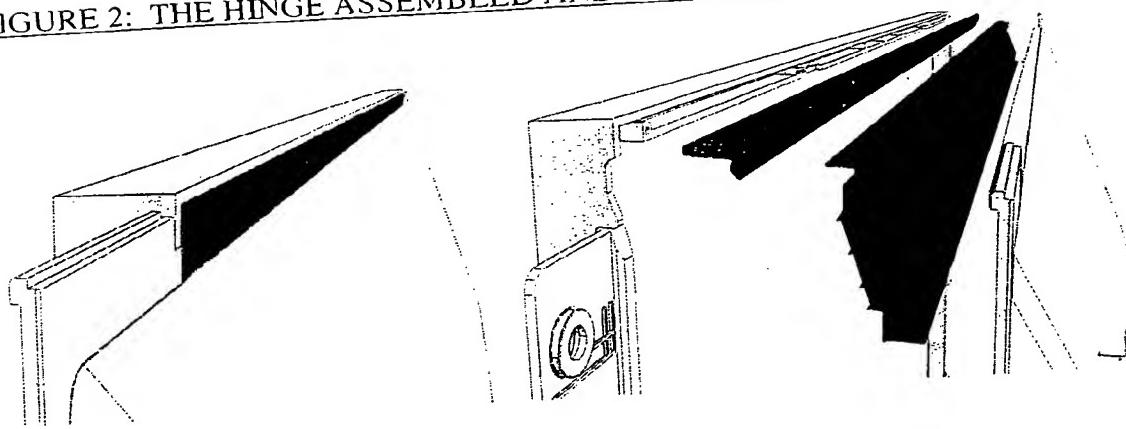


FIGURE 2: THE HINGE ASSEMBLED AND EXPLODED



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FIGURE 3: SECTIONS OF THE HINGE BEFORE AND AFTER ASSEMBLY

